## TRANSACTIONS

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546229

I. Some apparently new South African Genera and Species of the family Pyralidae. By A. J. T. JANSE.

#### [Read October 5th, 1921.]

THE species which I here describe were sent some time ago to the British Museum for identification, as Sir G. F. Hampson was then working at certain groups of the Pyralidae.

Owing to lack of time Sir George asked me to describe those that were new, supplying me at the same time with some valuable information as to the generic position of many of the species. I am very much obliged to Sir George and his successor, Mr. W. H. T. Tams, for the kind assistance given in this matter, which must have avoided the making of many synonyms.

In all cases co-types have been presented, when available, to the British Museum, and where many specimens were on hand more than one was sent to this institution.

Unless stated otherwise, the types and co-types are in my own collection and all the material was collected by me, unless the name of the collector has been specially given.

In describing the colours, Ridgeway's colour charts are used, and the figures in brackets indicate the plate on which the colour is to be found.

TRANS. ENT. SOC. LOND. 1922.—PARTS I, II. (JULY) B

#### Crambus leucofascialis, sp. n.

Female. Ground-colour of head, thorax, abdomen and wings white : palpi white on upper-, inner- and under-side, sides ochraceousbuff (xv); maxillary palpi ochraceous-buff at basal half, terminal half white; thorax and abdomen on underside and legs on outerside white; legs on innerside irrorated and tinged with fuscous; antennae white on upperside, fuscous at sides; patagia ochraceousbuff. Fore-wing :- greater costal half from base to termen ochraceous-buff, tinged with clay colour (xxix) between costa and broad white fascia, gradually becoming white towards inner margin; a narrow costal white edging, most sharply defined at basal half and edged outside with fuscous for one-fourth; a broad white fascia from base to termen with the upper edge from below upper median and between veins 5 and 6, the lower edge from below lower median to vein 2, where it sends a narrow white line along vein 2, then below lower median to vein 3, where also a white line is given off along the vein, then to termen and becoming bifurcate; a white sprinkling on veins 6 and 7; a white irregularly edged, narrow, gently curved line from base of white fascia to tornus : a diffused line of ground-colour on 1b, except at base; a fuscous terminal line; cilia at termen with two narrow fuscous-black lines and tipped with fuscous, along tornus and inner margin white. Hind-wing :---white, tinged especially at costal apical area with pale pinkish-buff (xxix); cilia white and a diffused faintly coloured line across it at middle.

Underside :—fore-wing uniformly tinged with hair-brown (xlvi), lighter along costa and where the white fascia is on the upperside, an almost white fascia above vein 1b and white scales at termen and terminal parts of veins; cilia almost entirely white near tornus, white and with two broad transverse hair-brown lines from apex to tornus. Hind-wing white, very thinly sprinkled with an indication of a hair-brown transverse line and tipped with same colour at apex.

Exp. Female type 23 mm., four female co-types from 20-25 mm.

*Hab.* Type, Pretoria, 13. i. 1915; co-types Pretoria in Sept., Oct. and Feb. 1911, 1913, 1915; one badly rubbed specimen from Warmberg (Zoutpansberg distr.) in Dec. 1903. Unfortunately only females have been secured so far.

The fore-wing is long and narrow, costa somewhat arched, termen very oblique, tornus well rounded, inner margin arched. Hind-wing large, termen very oblique and rounded towards tornus, which is much rounded; palpi nearly three times the head, antennae shortly ciliated.

This species is certainly close to *sjöstedti* Aur., as was suggested to me by Mr. Tams, but it differs from it in vein 11 anastomosing with 12, and veins 4, 5 being stalked, while the palpi are longer; the wing marking is almost identical, but *sjöstedti* is somewhat bigger (27–29 mm.). It is also close to *chalcimerus* Hmpsn., from which it differs in the stalking of veins 4, 5 of fore-wing, the absence of the narrow white line under the fascia and the difference of the white fascia itself. In the hind-wing the stalk of 4, 5 is  $\frac{2}{3}$ rd of 4, in some specimens shorter or the veins are only approximated to each other.

It comes in Hampson's part b of Section III, if the male antennae prove to be simple and not pectinated, which I have little doubt they will prove to be.

#### Crambus uniformella, sp. n.

Female. Vertex of head, palpi above, on inner- and under-side and hind-wing pure white; sides of head behind the eyes, thorax and abdomen above and on underside, legs, and fore-wing on upperside tilleul-buff (xl); fore-wing in one specimen (from Pretoria) pale einnamon-pink (xxix); fore-wing with a very fine irregular thin sprinkling of black scales, most dense where medial, postmedial and subterminal lines would have been; a small black terminal spot between the veins from apex to below vein 2; cilia eoneolorous. Hind-wing white; eilia white with a faint line at one-third owing to short scales densely placed at base of the more hair-like cilia.

Underside :—fore-wing tinged with avellaneous (xl), except at discal and terminal area; some black terminal points as above but smaller; eilia tipped with avellaneous; hind-wing white with costal area suffused with avellaneous; eilia as above; fore-legs suffused with drab (xlvi).

Exp. Type 28 mm.; co-types 22-28 mm.

Hab. Female type, Waterval Onder, 18. xi. 1920; three female co-types from same locality, 23. xi. 1910, Middelburg town (Transvaal), Dec. 1905, Pretoria, 11. xi. 1908; and one damaged specimen from Rietfontein (Pretoria distr.), 11. xi. 1904. Only females are known to me.

Palpi over two times the head; fore-wing narrow, costa well arched, termen oblique and round from vein 5 to tornus, which is well rounded; inner margin gently arched; 4, 5 connate at base for a short distance; 11 free from 12, but somewhat curved towards it; hind-wing large, costa almost straight, apex rounded, termen oblique and well rounded, tornus well rounded; 2 from a little beyond middle of lower median; 3 from before angle; 4, 5 shortly stalked and from angle; antennae with very short cilia.

This species is very much like *C. delatalis* Wlk., but differs from it in shape of fore-wing and less clearly defined marking; in shape of wing it comes near *C. ellipticellus* Hmpsn., but is easily separated from this by the uniform colour of the fore-wing.

#### Crambus reducta, sp. n.

Female. White; palpi at sides irrorated with fuscous; fore-legs tinged on outerside with hair-brown (xlvi); mid-legs tinged on outerside with avellaneous (xl); hind-legs tinged (like abdomen on underside) with tilleul-buff (xl); base of patagia tinged with hair-brown; antennae shortly ciliated, white above and the remainder hairbrown; fore-wing irrorated with hair-brown, more densely at terminal half and inner-marginal area; a narrow dark line along costa from base to one-third; an ochraccous-buff fascia above upper median from base to one-third of wing; a similar but broader faseia till middle of wing below lower median and defined on upper edge by a black, sharply defined line which becomes diffused and interrupted near vein 2; some more dense dark scaling at end of cell; a series of diffused fuscous-black points on the veins, mixed below vein 5 with some vellow scales, indicating the subterminal line, from the costa at three-fourth, oblique to vein 6 and then sharply bent and straight to inner margin before tornus (not parallel to termen from vein 7 to inner margin, as in C. sectitermina); no irroration on veins at terminal area; a series of terminal black points in the veins; cilia white, with two transverse hair-brown lines, first line narrow and sharply defined, second more broad and diffused; tips of cilia hair-brown. Hind-wing pure white, with a very faint transverse line at one-third.

Underside :—fore-wing almost evenly suffused with drab; hind wing with the costal area irrorated with drab.

Exp. Female type 22 mm.; female co-type 20 mm.

Hab. Type, Sawmills (S. Rhodesia), 1. ii. 1918; co-type (in rather rubbed condition) from Umvuma (S. Rhodesia), 10. i. 1918 (*Carnegie*).

Certainly closely allied to C. sectitermina Hmpsn., with

which it may be confused, but is distinguished from it by the subterminal line being further from termen and more oblique, and consisting mainly of black points on the veins with some yellow hairs mixed; by the shorter palpi, the light fascia in the cell being more diffused, and by the hind-wing having 4, 5 stalked. Vein 11 of fore-wing anastomoses with 12 as in C. sectitermina.

#### Crambus lacteella, sp. n.

Female. Head, palpi except at the sides, thorax, both wings on upper- and hind-wing on underside pure white; abdomen whitish, tinged at basal half with ochraceous-buff; palpi at sides and maxillary palpi at basal half, tegulae and patagia ochraceous-tawny (xv); fore-wing with the costal area at basal half and a fascia below the cell ochraceous-tawny; this fascia is sharply defined on upper edge and diffused at lower edge; costal and terminal area, and inner-marginal area above vein 1b for two-thirds of wing irrorated with pinkish-buff (xxix), except on the veins, which remain white; a pinkish-buff diffused streak in cell; black terminal spots on the veins from veins 2 to 8; cilia white, with a line of pinkish-buff at one-third and tipped with the same colour. Hind-wings pure white, slightly irrorated with pinkish-buff; cilia pure white.

Underside :—fore-wing densely irrorated with hair-brown except on inner-marginal area and near termen; cilia as above; veins even darker than on upperside. Hind-wing white; costal area irrorated with hair-brown. Fore-legs on outerside hair-brown, mid- and hind-legs and abdomen on underside vinaceous-buff (xl).

Exp. 24 mm.

Hab. Only one female specimen from Waterval Onder, 21. xi. 1910.

According to Mr. Tams this species is very close to C. mesombrellus Hmpsn., which is unknown to me.

Fore-wing moderately broad for a *Crambus*, costa somewhat hollowed out at middle, apex acute, termen oblique and rounded towards tornus, veins 4 and 5 connate at base for a short distance; 11 anastomosing with vein 12. Hind-wing large, semicircular; 2 from before middle of wing; veins 4, 5 shortly stalked. Palpi over two times head; antennae very shortly ciliate.

#### Diatraea argentisparsalis Hmpsn., fuscata, var. nov.

Male, female. Fore-wing densely irrorated with fuscous and the medial and subterminal lines are often noticeable as brown lines irrorated with fuscous. In perfect specimens is a line of silvery scales at submedial fold and similar scales just beyond the subterminal line; hind-wing smoky grey. I have many males and two females. My twelve typical *argentisparsalis* specimens all come from S. Rhodesia (Salisbury, Emangeni and Umtali in December and January), except one which is from New Hanover (Natal) in February. From the latter locality I have a specimen of var. *fuscata* and one of var. *pallidifascia*, but all my other specimens of these varieties come from Karkloof (not far from New Hanover) and were caught in January.

#### pallidifascia, var. nov.

This variety is in colour of fore-wing like *fuscata*, but has a long fascia of ground-colour in middle of wing from near base to subterminal line and just under the black point. This fascia is more or less diffused, and when many specimens are available this form will merge into the *fuscata* form. I have many males and two females of this form, all coming from Natal, all but one from Karkloof, one from New Hanover.

At first I thought *fuscata* to be distinct from *argentisparsalis*, but by carefully comparing a large amount of material I came to the conclusion that these two forms are only varieties. It is peculiar, that I have not yet had the typical form from Natal, but only from Rhodesia.

#### Mesolia uniformella, sp. n.

Female. Ground-colour of head, thorax, abdomen and fore-wing eream-colour; head and thorax irrorated with einnamon-buff (xxix); maxillary and labial palpi irrorated with einnamon-buff, leaving the base of the labial palpi white; abdomen irrorated and tinged with einnamon-buff, on the underside of ground-colour; legs white, femur and tibia of fore-legs densely irrorated in front with saccardo's umber (xxix); mid-legs only slightly irrorated with that colour; tarsi of fore- and mid-legs irrorated with saccardo's umber in middle, especially the fore-legs, so as to leave a ring of groundcolour above and below it; tarsi of hind-legs only very slightly irrorated in that way. Fore-wing with the whole of the basal, costal and apical area and the postmedial line densely irrorated with einnamon-buff; medial area from cell to inner margin thinly irrorated

with cinnamon-buff and auburn (ii) scales, so as to leave only the ground-colour at the basal area and forming the antemcdial and medial lines; these lines are broad and diffused and the medial line is somewhat zig-zagged and inwardly oblique; postmedial line beginning as a broad patch on costa of ground-colour, then diffused and with a fuscous irroration at end of cell; subterminal line of ground-colour, narrow and mostly well defined, oblique and double from costa to vein 6 (outer line zig-zagged) then single and parallel to termen and zig-zagged very sharply at the veins, then to tornus; some fuscous irroration on the veins before it between veins 6 and 3; the outer subterminal line is continued beyond the lobe as an ill-defined line before the terminal line, which is auburn and narrow; apical lobe very blunt; cilia of groundcolour, with a transverse auburn line at one-third and tipped with the same colour and some fuscous. Hind-wing uniformly smoke grey (xlvi), with a fuscous irroration on the veins and along the termen: cilia cream-colour with two smoke grey lines across it as far as from 1c to apex.

Underside :—both wings whitish grey; fore-wing irrorated at costal half and towards termen with fuscous; cilia as above. One co-type (from Umvuma, 20 xii. 1917) has the fore-wing somewhat darker and the markings less distinct as if it were somewhat greasy, which, however, is not the case.

Exp. Type 23 mm.; co-types 22-23 mm.

Hab. Female type, Umvuma, Dec. 1918 (Carnegie); two female co-types from Umvuma, 20. xii. 1917 (Janse); one female co-type in Transvaal Museum from Waterberg district (Transvaal) in 1899, by Jutrzencka; three other specimens from Shangani (S. Rhodesia), by Miss Chamberlain in Nov. 1919.

This species was identified for me at the British Museum as a *Prionapteryx*, but closer examination has shown me that it should be placed in *Mesolia*, a genus up to now only known from Asia, Australia and St. Helena, so that it is new to Africa. The apical prominence is more like that in *Mesolia*, vein 4 is absent in both wings (in *Prionapteryx* it is present in the fore-wings); 7 is stalked with 8, 9; hind-wing with upper median far from vein 8 and vein 7 curving upwards so as to anastomose with 8; proboscis fully developed; outer spurs shorter than inner, but not in all cases, as much as half the length of the inner one; antennae of female lamellated and shortly ciliate.

#### HYPSOTROPINAE.

#### Mesodiphlebia rhodesiana, sp. n.

Male. Head, palpi, thorax and fore-wing eream-colour (xvi); palpi irrorated at sides with fuscous-black; a conical tuft of hair and some scales on frons of cream-colour and fuscous-black mixed; legs cream-colour and irrorated with fuscous: abdomen above and on underside and thorax on underside whitish; antennae ereamcoloured. Fore-wing with costal area above upper median whitish, irrorated with fuscous-black but leaving vein 12 and upper median whitish; a more dense irroration below upper median and this is continued to apex below vein 9, where the irroration is most dense; some slight sprinkling of fuscous-black over the whole wing, most dense below lower median on 1b and along termen; an antemedial, rounded, diffused spot on 1b and a medial irroration suggesting the medial line; a rounded spot with a light centre at end of cell; a diffused postmedial line from 9, parallel to termen, then curved inwardly at 2, then outwardly oblique to tornus; cilia whitish, tipped with fuscous-black and with an indication of a line at middle. Hind-wing whitish or pure white; in some specimens with fuscous suffusion along termen; cilia white.

Underside :---with the ground-colour as above, but in the forewing more densely and in the hind-wing slightly suffused with fuscous. Proboscis very slight, but in some specimens visible.

Exp. Male type 14 mm.; four co-types 14-15 mm.

Hab. Victoria Falls in Jan. 1918, caught at light.

#### Rhinaphe lutosa, sp. n.

Male and female. Head, palpi, shaft of antennae, thorax, abdomen, legs and fore-wing pale ochraceous-buff (xv); palpi sprinkled with black, basal half of third joint irrorated with black; legs irrorated with fuscous-black; fore-wing irrorated with light pinkishcinnamon (xxix) and more or less densely sprinkled with fuscousblack; all markings on fore-wing fuscous-black; a diffused basal line from below costa; medial line broad and consisting of fuscousblack irroration, from eosta to upper median oblique, broad and dense, then erect, faint and only plain on lower median and 1b; postmedial faint from eosta to upper angle of cell, then inwardly oblique and faint, most conspicuous on upper and lower angle of cell, where it forms a more or less distinct macula; subterminal rather far from termen, inwardly oblique from costa to half-way end of cell and termen at vein 6, then somewhat excurved and to tornus and only distinct on the veins, where it forms more or less distinct maculae; a terminal series of triangular maculae between the veins; eilia of ground-colour with a distinct broad diffused fuscous line at one-third and a faint and narrow line at two-thirds. Hindwing whitish, slightly irrorated and tinged towards costa with fuscous; eilia whitish with a faint diffused fuscous line at middle.

Underside whitish; hind-wing slightly and fore-wing very densely irrorated with fuscous-black, especially towards costa; in fore-wing a somewhat lighter irroration at subterminal line; some fuscous terminal stigulae between the veins; cilia as on upperside.

Exp. Type 19 mm.; female type 20 mm.; male co-types 16–19 mm.; co-types from 17–20 mm.

*Hab.* Male and female types from Sawmills (S. Rhodesia), 1. ii. 1918; nine male co-types from Sawmills in Feb., Emangeni (S. Rhodesia) in Jan., and Bulawayo, Dec. 1919; six female co-types from Emangeni Jan., Sawmills, Feb., Bulawayo, Dec., Mazoe (S. Rhodesia), Dec. 1919.

I have many other males from the same localities and collected at the same time. A female in the Transvaal Museum from the Waterberg distr. (Transvaal) most probably belongs here also, but is in too rubbed condition to be certain.

Perhaps this species requires to be placed in a genus of its own, for the fore-wing has veins 3, 5 on a stalk; however, some species of *Rhinaphe* have these veins connate. Antennae of male servate at lower half and ciliated over the whole length; in female simple and ciliated.

#### Rhinaphe flavodorsalis, sp. n.

Male. Head, palpi, shaft of antennae, thorax, ground-colour of abdomen and fore-wing vinaceous-buff (xl); palpi with terminal half of second and whole of third joint irrorated with fuscous-black; some fuscous-black sprinkling on thorax; abdomen above at second, third and fourth segment deep chrome (iii), the remainder sprinkled with fuscous-black; fore-legs densely irrorated with fuscous; midand hind-legs, thorax and abdomen on underside sprinkled with fuscous. Fore-wing with the veins, a streak in cell and at submedian fold lighter than the ground-colour, almost white; space between the veins irrorated with fuscous-black, light lines in cell and at submedian fold and on la and lb edged with fuscous-black irroration; a spot of fuscous-black scales at one-third on lb; a fuscous-black scaling at upper and lower angle of cell, on upper angle often obsolete; in some specimens a fuscous-black scaling suggesting postmedial line; small fuscous-black spots between the veins at termen; cilia of ground-colour, with a diffused line at middle. Hind-wing white, with a terminal fuscous edging; cilia of ground-colour except the base, while the inner-marginal cilia have a yellowish tinge; a faint transverse line aeross them from costa to beyond tornus.

Underside :---ground-colour of both wings pale smoke grey; forewing very densely irrorated with fuscous-black, especially along costa; hind-wing slightly irrorated with fuscous; cilia darker than on upperside.

Female like male, but antennae simple.

Exp. Male type 17 mm.; female type 16 mm.; male co-types 14-20 mm.

Hab. Male type, Sarnia, Feb. 1910; female type, Sarnia, Feb. 1913. Male co-types from Sarnia in Jan., Feb., Verulam, Dec., Eshowe, Jan., New Hanover, Oct.; in all nine specimens.

Palpi in male obliquely ascending, second joint with rather long hairs and scales on innerside; antennae with lamina as long as thickness of shaft and eiliated; in female antennae simple; frons with a tuft of scales. In one specimen vein 10 is absent in both fore-wings. Hindwing with 3, 5 on a long stalk of over half to three-fourth of veins.

This species comes in Section II of Hampson, after group A, from which it differs in the antennae having no sinus at base.

#### Saluria albicostella, sp. n.

Male. Head, thorax and fore-wing on upperside jasper red (xiii); palpi whitish, tinged on innerside with jasper red and at tip with fuscous; shaft of antennae at base jasper red; fore-wing whitish but very densely and uniformly irrorated with jasper red, except on lower median, part of veins 2 to 5, the whole of 1b and a costal fascia above upper median from base to apex; this fascia is more pure white and only on basal two-thirds partly and slightly irrorated with geranium pink (i); a somewhat dark suffusion against lower part of white fascia; cilia rose dorée (i); hind-wing whitish, with a darker tinge towards apex and along termen; cilia white, with a faint line across at one-third; abdomen whitish, perhaps yellow, but I think that this yellow colour is due to greasiness.

Underside :- both wings light pinkish-cinnamon (xxix), darkest

on upper wing especially towards costa and at base. lightest in hind-wing, especially at inner-marginal area; cilia as above. Legs whitish, but outwardly heavily suffused with geranium pink, especially the fore-legs.

Exp. 23 mm.

Hab. Male type from Barberton, 28. i. 1911 (Janse). One specimen only.

This species comes in Section I, A, d of Hampson, as the palpi are oblique and the antennae of the male are laminated. The antennae have a slight sinus at base.

#### Saluria pulverata, sp. n.

Male and female. Head, palpi, thorax, legs, abdomen on underside and fore-wing tilleul buff (xl); palpi at sides, legs on outer side, thorax and abdomen on underside more or less irrorated with fuscous and often tinged with vinaceous-buff (xl); abdomen above pale orange-vellow (iii). Fore-wing in several specimens tinged, except the costal fascia, with vinaceous buff; a costal fascia, formed by a fuscous black irroration, below upper median and extended to costa just before apex; this fascia is sharply defined on upper median and vein 9 but diffused towards lower median; a subbasal and an antemedial broad fuscous-black irroration, well below lower median and an indication of a medial and postmedial similar irroration below the fascia, and of which the postmedial irroration is rather oblique; some fuscous irroration on the fascia, mainly near the costa, leaving the side towards the uppermedian almost white; some black terminal points at end of veins from 1b to 6; cilia of ground-colour, slightly tinged with vinaceous-buff. Hind-wing whitish; some slight fuscous terminal irroration from vein 2 to apex and slightly extended over the veins; cilia whitish, with a short row of white scales at base.

Underside :—Both wings whitish; fore-wings rather densely irrorated with fuscous, most densely costad; hind-wing slightly irrorated with fuscous near costa; inner-marginal area pure white. Antennae of male with slight sinus and tuft of scales at base; shaft slightly serrate and ciliate; female antennae simple, minutely ciliated.

Exp. Male type 22.5 mm.; co-types 18-23 mm. Female type 18 mm.; co-types 23 mm.

Hab. Male type, Umkomaas, 23. i. 1914; female type, Umkomaas, 30. i. 1914; co-types from Umkomaas, 4–30. i. 1914, and one male from Sarnia, 17. i. 1912 (Janse); also one badly preserved male from Durban, 13. xii. 1916 (v. d. Merwe); eleven specimens in all.

I think this is correctly placed in *Saluria*, although the fore-wing has 4 and 5 on a rather short stalk, and though the palpi are obliquely upturned, extending above the frons for length of head and pointed towards tip.

#### Saluria pretoriae, sp. n.

Female. Head, palpi above, thorax and abdomen ochraceousbuff (xv); palpi and head on underside white; palpi at sides, head and prothorax in some specimens slightly tinged with old rose (xiii), in other specimens well coloured with it, especially the palpi; fore-wing tinged with ochraceous-buff, except a rather broad costal fascia which remains pure white; the ochraceous-buff tinge is lightest towards inner margin and suffused with cinnamonrufous (xiv) against the white fascia, except near base, where the suffusion is more old rose (in some specimens the suffusion is old rose over the whole length); cilia vinaceous-buff (xl), in some specimens tinged and tipped with old rose. Hind-wing vinaceousbuff, in some specimens whitish; cilia concolorous and with a darker subbasal line.

One female specimen is almost coloured like the example I take to be a male of this species (see below), but the hind-wings are a little lighter.

Underside :—drab-grey (xlvi); fore-wing towards costa well irrorated with light drab (xlvi); cilia drab-grey, in hind-wing with a light subbasal line; legs whitish, tinged outwardly with old rose, especially the fore-legs; thorax whitish, abdomen light ochraceousbuff.

The palpi are porrect and about three times length of head; frons with a tuft of hair; antennae ciliated; forewing with veins 4, 5 in most specimens slightly stalked, in one almost from a point, but in the specimen that I think may be the male they are stalked for about half the length of the veins; hind-wing with veins 7 and 8 anastomosing.

Male (?). One specimen which I take to be the male of this species has unfortunately no palpi; the antenna has a very slight sinus with some scales on innerside; the fore-wing is narrower and the colour is darker and without an indication of pinkish. I have little doubt that it belongs here, though it is in too poor condition to be sure. Exp. Female type 21 mm.; co-types 18.5-21 mm.; male (?) 18.5 mm.

Hab. All specimens from Pretoria. Female type in 7. v. 1910; co-types in May 1910, Oct. 1909, July 1906; thirteen specimens in all. Male (?) from Pretoria in April 1906.

#### Hypsotropa roseotincta, sp. n.

Male. Ground-colour of head, thorax and fore-wing apricot vellow (iv); palpi at sides and shaft of antennae maize vellow (iv) tinged with pinkish-buff (xxix); abdomen maize vellow; legs maize yellow and densely irrorated with carrot red (xiv): forewing has costal area tinged with orange buff (iii) and is above vein 11 densely irrorated with carrot red as far as apex: a similar. but less dense, irroration below lower median till near inner margin where it becomes gradually less dense, except near tornus; a carrot-red rounded spot at end of cell, with some fuscous scales in it; postmedial line produced by a rather broad carrot-red irroration, best defined inwardly, oblique from near apex and parallel to termen to above submedian fold, where it becomes curved inwardly and joins the inner-marginal irroration, then forming a curve outwardly and ending at inner margin at two-thirds; a terminal carrot-red irroration more or less interrupted at the veins. (In some specimens the carrot-red irroration is reduced and even almost absent at inner-marginal area and the macula at end of cell, the postmedial line from vein 6 to inner margin and the indication of an antemedial line from lower median to inner margin consists of a fuscous irroration.) Cilia of ground-colour with a darker subbasal line. Hind-wing white, with a tinge of pale smoke grey along costal and apical area; cilia white, with a pale smokegrev subbasal line.

Underside :— Both wings whitish; fore-wing irrorated rather densely with drab (xlvi); hind-wing slightly irrorated with drab along the costa only.

Exp. Male type 19 mm.; male co-types 14-16 mm.

Hab. Male type from Pretoria, 4. iii. 1910; co-types from Waterval (Zoutpansberg distr.), 6. xii. 1899; Barberton, Dec. and Jan. 1910, 1911; in all six specimens.

The antennae are lamellated and with moderate cilia and may thus have to be placed in Hampson's *Heosphora*group.

#### Commotria simplex, sp. n.

Male. Ground-colour of palpi, head, thorax, abdomen and forewing whitish, somewhat irrorated with ochraceous-salmon (xv); palpi at side and in the middle and base of fore-wing along costa suffused with fuscous; fore-wings more or less densely irrorated with ochraceous-salmon, densely along costa but leaving the veins, the cell and plical fold practically free; a series of fuscous spots : two antemedial ones below lower median and indications of one before it above lower median; two medial spots below lower median, upper one strongest, lower one on lb very faint; an indistinct spot at lower angle of cell; a postmedial series of similar spots on the veins, from near apex to lb and somewhat inwardly arranged at vein 6; small terminal spots at end of veins; eilia whitish, tinged with ochraceous-salmon. Hind-wing pure white, with a darker tinged edging along termen; eilia white, with a faint grey subbasal line.

Female. Ground-colour light buff (xv) and more heavily suffused and irrorated with ochraceous-salmon.

Underside :—Wings and legs whitish; fore-wing heavily and hind-wing slightly along costa and legs at front suffused and irrorated with light drab (xlvi); cilia of both wings whitish.

Exp. Male type 18 mm.; female type 20 mm.; co-types 18-22 mm.

Hab. Male type, Salisbury, 27. xii. 1917; female type, Salisbury, 30. xii. 1917; co-types from Salisbury, Dec. 1917, and Umvuma, Dec. 1917.

The antennae of the males are laminate and ciliate, of females simple. In all 5 males and 2 females.

#### Commotria albistria, sp. n.

Male and female. Head, thorax, abdomen and veins of fore-wing pure white; palpi with the second joint on innerside and the whole third joint fuscous; vertex at sides and patagia tinged with tilleulbuff (xl); most veins edged on both sides by a black irroration; costal, terminal and inner marginal area tinged with light vinaceousfawn (xl); space in cell and between vein 1b filled up with creambuff (xxx); a white line below 1b from base to inner margin at middle; inner margin with a white edging which is broad at base; a blackish irroration on 1b at one-third and a series of black postmedial irroration on vein 1b to vein 5; some black irroration between veins 8, 9; a similar irroration between all veins at termen; cilia tilleul-buff with blackish subbasal tufts between the veins, leaving a light-coloured basal line; hind-wing whitish, with terminal area irrorated and suffused with drab (xlvi); cilia whitish with a drab subbasal sinuated line, leaving the base of the cilia slightly yellow. Abdomen above with the first few segments pale orange-yellow, but owing to greasiness it is not possible to see how far it extends.

Underside :—Whitish, heavily suffused, especially along costa of fore-wing with hair-brown (xlvi); hind-wing almost whitish at inner-marginal area; cilia as above, but subbasal line continuous. Legs whitish, somewhat suffused with light drab.

Exp. Male type 20 mm.; female type 21 mm.; co-types 17–24 mm. Four males and twelve females.

*Hab.* All specimens but two from Sawmills (S. Rhodesia), the two from Victoria Falls, 27. i. 1918; male type, 1. ii. 1918; female type, 4. ii. 1918; co-types from 1-5. ii. 1918.

#### Commotria ruficolor, sp. n.

Male and female. Head, palpi, thorax, legs and ground-colour of fore-wings pale yellow-orange (iii), heavily suffused, except vertex of head, with earrot red (xiv); palpi at sides slightly irrorated with fuscous; fore-wing with ground-colour only on veins 12, 11, part of veins 10 and 9, upper- and lower-median and vein 1*b* paler than ground-colour of wing; a similar pale line just before costa; some slight fuscous irroration here and there in the wing, especially below upper median and towards apex; a rounded fuscous irroration at lower angle and an indication of some antemedial spots; a postmedial series of similar spots above the veins, sometimes partly or entirely wanting; a terminal series of fuscous spots at end of veins, but sometimes wanting; eilia carrot red. Hind-wing pure white with very slight tinge of pale yellow-orange.

Underside :— Tilleul-buff (xl), darkest on fore-wing, almost white on inner-marginal area of hind-wing; cilia whitish. One male from the same locality with the irroration on fore-wing black and more dense, extended from base along upper part of cell to apex, even into the cilia; a faint irroration below lower median at middle, one below origin of vein 2, and postmedial series broader and more marked. Cilia of hind-wing at apex tinged with carrot red.

Exp. Male type 18 mm.; female type 22 mm.; co-types 20-26 mm.

Hab. Male type, Victoria Falls, 25. i. 1918; female type, Umtali, 5. i. 1918; co-types all from Umtali, 3-11. i. 1918. According to the British Museum, this species comes close to C. mesiella Hmpsn.

Palpi are porrect and a little over three times length of head; in female four times head. Antennae in male uniserrate and ciliate and in female ciliated only.

#### Commotria leucosparsalis, sp. n.

Male and female. Head, palpi, thorax, and abdomen on underside and ground-colour of fore-wing warm buff (xv); abdomen above light orange-yellow (iii); legs warm buff sprinkled with white scales and hairs ; tarsi on outer side avellancous (xl), terminally ringed with warm buff; palpi at sides, thorax here and there and fore-wing at inner-marginal area sparsely sprinkled with fuscousblack (xlvi); in two specimens from Sawmills the palpi, thorax and ground-colour of fore-wing are more cinnamon-buff (xxix) and the fuscous-black irroration is more dense; fore-wing with costal area as far as the lower median and especially on the veins well irrorated with white scales; veins 1b and 2 postmedial area between veins 2 to 5, and the terminal area as far as vein 2 also irrorated with white scales; costa at base with rufous (xiv) scaling; a fuscousblack elongated antemedial spot on vein 1b and similar striga above it on lower median and discal fold, the two spots connected by an outwardly curved irroration suggesting the antemedial line; some well-marked irroration below it to inner margin; medial line from middle of inner margin to lower angle and some irroration on discocellulars; two narrow fuscous-black striga from disco-cellulars to postmedial line, one on vein 5 and one on vein 6; a fuscous-black elongated postmedial series of points on veins 1b, and 3 to 7, those on 6 and 7 often obsolete: a series of terminal fuscous-black spots between veins 1b to 7; the costal half of the wing here and there sprinkled with rufous (xiv) scales, which are absent in the "Sawmills 22 specimens, these, however, have more fuscous-black and even black irroration and a corresponding decrease of white scaling; cilia of ground-colour and with two transverse lines produced by fuscous and white scales mixed. Hind-wing sub-hyaline, light buff (xv) and tinged on the veins, costal and terminal area with buff-brown (xl); cilia of ground-colour with one buffy-brown transverse line at 4rd.

Underside:—Both wings with ground-colour light buff but forewing densely irrorated and hind-wing slightly tinged at costal area with fuscous; cilia as above, but on fore-wing without the white scales.

Antennae of male unipectinate for two-thirds, branches over

width of shaft; a scale tuft on upperside above basal joint and about six joints in length; in female antennae simple. Palpi of male rostriform and porrect, about two times length of head; in female drooping.

Exp. Male type 20 mm.; female type 24 mm.; male co-types 18.5 mm. to 24 mm.; female co-type 23 mm.

Hab. Male type, Umkomaas, 2. i. 1914; female type, 28. i. 1914; co-types from Umkomaas, 10–31. i. 1914, Maritzburg, 1. ii. 1916, Sawmills, 1–4. ii. 1918; in all eight specimens.

#### Statina albivenella, sp. n.

Male and female. Head, palpi, antennae, thorax and legs, abdomen and fore-wing pale yellow-orange (iii); palpi, tuft of hair on frons, legs on outerside and abdomen on underside irrorated with fuscous; fore-wing with vein 12, upper median and vein 11, lower median and vein 1b white; the latter two with fuseous irroration; costa well irrorated with fuscous; all maculae consist of fuscous irroration, often ill-defined; the first macula is on vein 1b, followed by an antemedial series of three maculae, one on lower median and ill defined, second on 1b, third at inner margin; a well-defined rounded macula at end of cell; a postmedial oblique and straight series of maculae, first on vein 6 and rather narrow, second between veins 4, 5, third on vein 3 and fourth on 1b to inner margin; a white line on upper median and vein 11, edged on inner side by a fuscous irroration which is continued to apex, where it joins a terminal fuscous irroration which is broad near apex and narrowing to 1b; cilia whitish at base, then pale ochraceousbuff (xv) and with a transverse fuscous line at one-third. Hindwing whitish; some terminal fawn-coloured (xl) suffusion; cilia light-buff (xv) with a faint transverse line at one-third.

Underside whitish; fore-wing heavily and hind-wing slightly suffused with avellaneous (xl); cilia of fore-wing avellaneous and with a dark transverse line at one-third; hind-wing cilia as above, but transverse line more distinct.

Exp. Male type 16 mm.; female type 18 mm.; co-types from 16-17 mm.

Hab. Male and female types from Barberton, 19– 20. xii. 1910; co-types from Barberton, 15. xii. 1909 to 5. i. 1910; one male co-type from Nelspruit, Nov. 1917, collected by Dr. Breyer, and in the Transvaal Museum. In all seven specimens, of which only one is a female.

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Sir George Hampson informed me that he thought this species ought to come into a new genus, but I do not think it sufficiently distinct from *Statina*, as far as I know that genus from the description. I thus leave it here for the present, as it differs from *Statina* only in the following characters: Maxillary palpi two-jointed and with long hair, antennae with basal joint moderate, cylindrical, shaft rounded and without scales above the basal joint, ciliated; fore-wing with vein 11 from upper angle; 6 from nearly  $\frac{2}{3}$  of disco-cellulars.

#### CALAMOTROPODUS, gen. nov.

#### Type grisella.

Proboseis minute; palpi obliquely porrect, about two times length of head; first joint small, second joint four times as long as first joint, broad at middle, inner edge well eurved outwardly, outer edge slightly eurved inwardly; third joint about one-third of second joint and pointed, second and third joint covered with dense hairs and scales; maxillary palpi apparently absent; frons with a large conical prominence which ends bluntly and forms a eircle, it is covered with hairs and scales; antennae laminated and ciliated. Fore-wing rather broad, about one-third of length; eosta gently arched; apex rounded, termen oblique and arched; vein 2 from well before lower angle; 3 and 5 well apart; 4 absent; 6 from before upper angle; 8, 9 stalked for one-third of 8; 10 free and from half-way upper angle and origin of vein II; 11 free; 12 parallel to upper median and vein 11. Hind-wing with vein 2 from near lower angle; 5 from angle; 3 and 4 absent; 6 and 7 very shortly stalked: 8 anastomosing with 7 for about 3 of 7.

I have little doubt that this genus comes near *Calamotropa*, from which it differs in the position of vein 2 in fore-wing and in vein 8 of hind-wing anastomosing with 7, also in the absence of the maxillary palpi and in the presence of the tongue, though it is rudimentary.

#### Calamotropodes grisella, sp. n.

Male. Palpi, head, thorax and abdomen above milky white; abdomen above whitish; palpi irrorated at sides with black; tegulae tinged with eream-buff (xxx); fore-wing with a broad cream-buff faseia from base to near apex, well defined costad, diffused on the other side and edged with blackish on upper median and vein 8, extending to lower median and beyond the cell broken up into two spurs by vein 6; costal white fascia irrorated with black, except near upper median and vein 9, where it remains pure white; a black irroration on lower median and vein lb and below that at basal half, a dense irroration at terminal area; a blackish diffused spot on upper and lower angle; cilia drab (xlvi), with three narrow transverse white lines across, caused by white tipping of the scales. Hind-wing whitish with the apical and terminal area suffused with drab; cilia whitish with a subbasal drab line.

Underside :—Wings, abdomen and legs whitish; legs and abdomen densely irrorated with black; forc-legs on outer side suffused with quaker drab (li); abdomen left white at the end of each segment. Fore-wing deeply suffused with quaker drab including the cilia; hind-wing irrorated with quaker drab and fuscous, cilia only suffused with quaker drab at apical area.

Exp. Type 17 mm.; co-types 16-20 mm.

*Hab.* All specimens from Sawmills (S. Rhodesia), 1–5. ii. 1918; seventeen specimens in all.

#### Polyocha anomalella, sp. n.

Male, female. Head, palpi, thorax and fore-wing light vinaceouscinnamon (xxix); fore-wing slightly sprinkled with fuscous; the veins and three fascia in cell, of which the middle one is continued beyond the cell to termen, whitish; cilia of ground-colour. Hindwing cartridge-buff tinged with pinkish-buff towards termen and cilia with a basal line of that colour; a slight fuscous irroration at apical and terminal regions.

Underside :—Both wings whitish, densely irrorated with fuscous; legs light vinaceous, irrorated with fuscous.

Exp. Male types 31 mm.; female type 36 mm.; co-types 31-35 mm.

Hab. Male and female type from New Hanover (Hardenberg), 15th Jan. and Feb. 1915; co-types from Karkloof, 13. i. 1917; Shafton House (Symons), 19. iii. 1917; New Hanover, 9. iii. 1914; Barberton, 19. xii. 1910 (Janse); six specimens in all.

It was suggested at the British Museum that this species should be placed in the genus *Emmalocera*, but the forewing has as a rule veins 4, 5 stalked and not apart from 4 as is the case in that genus. The specimens examined at the British Museum have these veins from a point and approximated to each other for a long distance, but the other specimens have them clearly stalked, often for nearly half their length. The maxillary palpi are small and not hidden in the labial palpi; on the other hand, the antennae of the male have a sinus at near base with a tuft of scales and the shaft is pectinate with uniserate branches of about three times the shaft; the frons has a tuft of scales. In the female the antennae are simple, slightly laminate and ciliate.

#### EPIPASCHIANAE.

#### NEOPASCHIA, gen. nov.

## Type flavociliata, sp. n.

Female. Palpi upturned, slender, reaching above vertex; first joint about half of second, third a little shorter, palpi smoothly sealed; maxillary palpi invisible; tongue absent; antennae shortly eiliated and without a tuft at base. Fore-wing rather narrow, costa and apex rounded, termen straight and oblique; a tuft of raised seales at end of cell; 1b simple at base; cell rather long,  $\frac{2}{3}$  of wing; 2 from before angle; 3, 4 from angle, stalked for  $\frac{1}{3}$  of 3; 5 absent; disco-cellulars faint; 6 from well before upper angle; 7, 8 from upper angle, stalked for  $\frac{3}{4}$  of 8; 9 absent; 10 from just before angle; 11 from  $\frac{3}{4}$  of upper median; 12 parallel to upper median and vein 11. Hind-wing semicircular; termen with rounded lobe at 2-3; apex and tornus well rounded; cell over half of wing; 2 from near lower angle; 3 and 4 from angle, stalked for  $\frac{1}{4}$  of 3; 5 absent; 6 and 7 from upper angle; 7 and 8 anastomosing for about  $\frac{1}{6}$  of 7 and well beyond origin of 7; frenulum simple.

This is the most reduced Epipaschianid known to me, and must be placed immediately before *Arnatula*, from which it differs mainly in the absence of vein 5 in both wings and of 9 in the fore-wing. Unfortunately no males are known to me.

#### Neopaschia flavociliata sp. n.

Female. Ground-colour of head, thorax, abdomen and wings maize yellow (iv); head, palpi, thorax and fore-wing densely tinted and irrorated with morocco red (i); legs morocco red, sprinkled with black, tarsi of fore- and mid-legs fuscous-black, of hind-legs irrorated with fuscous, and terminally ringed with yellow; antennae with shaft morocco red; tegulae tipped with yellow and closely irrorated with morocco red; abdomen on upper- and under-side closely irrorated with morocco red. Fore-wing over the whole

area except a line before the medial and beyond the postmedial line so densely irrorated with morocco red that the ground-colour can scarcely be seen; an ill-defined antemedial line of orangerufous (ii) scales mixed with black scales; medial line before middle of wing, black, curved from costa to inner margin and sharply incurved at lower median, the black line is preceded by a broader line of ground-colour, irrorated with orange-rufous; raised scales at end of cell orange-rufous; postmedial line from beyond <sup>2</sup>/<sub>7</sub> of costa to near tornus and of ground-colour, beginning at costa with some black scaling, then bordered on innerside with orange-rufous scaling, as far as vein 3 and curved inwardly to vein 2, then sharply excurved to tornus; from vein 3 to tornus the interior bordering consists of black scales; some white and black scales in apical area; cilia light orange-yellow (iii) mixed at apex and tornus with morocco red: two lines of morocco red across the cilia which are slightly tipped with the same colour. Hind-wing densely and evenly irrorated with fuscous; indications of a postmedial fuscous-black line from 1c-4, preceded and followed by a patch of morocco red scales; cilia light orange-yellow, except at tornus where they become fuscous-black, near apex they are well mixed with morocco red; three lines of morocco red across the cilia, of which the two inner ones are broadest and best defined.

Underside :—both wings heavily irrorated with fuscous; costa of fore-wing and the apical area irrorated with morocco red; postmedial line better defined and reaching from costa to tornus, oblique from costa to vein 2 near termen, then curved inwardly between veins 2 and 1c, 1c and 1b; this fuscous-black postmedial line is bordered outside by a line of ground-colour; cilia of both wings as on upperside.

Exp. Type 19 mm.; co-type 18 mm.

Hab. Type from Barberton, 11. xii. 1910; co-types, Barberton, 7. xii. 1910, and Three Sisters (Barberton distr.), 6. iii. 1911. Unfortunately only females have been caught so far.

#### Macalla melanobrunnea; sp. n.

Ground-colour of head, thorax, abdomen, wings on upper- and under-side and legs cream-colour (xvi); head densely irrorated with black; palpi with basal half covered with morocco red (i) scales and a few black scales between; upper half of palpi irrorated with black scales, except ends of second and third joints which remain cream-coloured; fore-legs with femur and tibia densely irrorated with morocco red; tarsi cream-coloured and broadly banded with

black: mid-leg with the femur and tibia a little less densely irrorated with morocco red, tarsi and spurs cream-coloured and broadly irrorated with black; hind-legs thinly irrorated with moroeco red and black seales mixed, irroration on the spurs and tarsi less dense; thorax above irrorated with morocco red and black seales mixed: abdomen above with first segment narrowly irrorated with black, second broader black irroration, third with black irroration on posterior half only, fourth to seventh almost entirely black, mixed with some ochraceous-salmon (xv) scales except at the sides and leaving a very narrow line of ground-colour posteriorly; eighth segment irrorated with deep ehrome (iii) scales mixed with cchraeeous-salmon; antennae ciliated, shaft saval brown (xxix), basal process as long as thorax and eovered with rather long black spathulated scales and some hairs, especially towards extremity. Forewing with a little less than basal half densely irrorated with moroceo red, black and bluish slate-black (xlviii), mixed so as to appear to the naked eye quite black with a steel-blue gloss; a faint diffused subbasal oehraceous-orange (xv) line from eosta to 1b; antemedial line of same eolour from eosta to inner margin, beginning as a creameoloured broad patch at costa and having a fan of black scales on it in cell and a similar fan before it below lower median; medial line, defining black area, straight and erect and with a fan of black seales in cell often projecting a little beyond the line; this fan is surrounded by yellow-brown seales; a postmedial line of groundcolour, preceded by some black triangular scaling at the costa, directed outward to vein 5 and somewhat dentated between the veins, then eurved somewhat inwardly to plical fold, then to tornus; area before this line from vein 6 to inner margin densely irrorated with moroeeo red and some vellow irroration before this; whole area beyond the postmedial line irrorated with moroeeo red, except a terminal area, which is broad near apex and ends at vein 2; terminal area irrorated with yellow; some terminal black lunules on the veins, which have a tendency to become a fine black terminal line in some specimens; cilia with a faint line in middle and of ground-colour. Hind-wing with some fuscous seales on inner margin near base; a fuscous postmedial irroration from before vein 2 to vein 3; a subterminal fuseous irroration from 1c to apex. densest near tornus and gradually getting more sparing towards apex: a terminal irroration from tornus to vein 2, then becoming lunules on the veins; eilia with a faint line in middle.

Underside :—both wings of cream-colour; fore-wing irrorated at basal half with black and beyond that the costal area is irrorated with morocco red; a postmedial line, corresponding to the one on upperside, but situated before it and consisting of black irroration;

terminal lunules as above; hind-wing with costal half as far as postmedial line, thinly irrorated with black scales; medial line of black irroration from costa to lc, then angled upwards between lcand lb, where it ends; terminal irroration more conspicuous than above.

Female. Fore-wing as in male, but irroration more dense and the markings more sharply defined; cilia with well-marked middle line consisting of chequered patches of black scales; more black scales towards outerside especially near the apex; hind-wing with dense irroration of fuscous all over and markings darker than in male, in addition a moreceo-red scaling between veins 1c and 3 just before and well beyond the postmedial line; cilia as on upper wing.

Underside as in male, but wings densely irrorated with morocco red and mixed, as far as postmedial line, with fuscous scales; cilia also with a more distinct fuscous line in middle.

Exp. 22-25 mm.

Hab. Male type from Hope Fountain (near Bulawayo), 16. i. 1918; female, Bulawayo, 15–23. xii. 1919; eleven male co-types from Hope Fountain, Pretoria, New Hanover, Sarnia, Eshowe, Barberton, and Waterval Onder, in Nov., Dec., Jan., Feb.; four female co-types from Bulawayo, Waterval Onder, Barberton, Sarnia, Umkomaas, and one very worn specimen from Pinetown.

The palpi of the male have the second joint above the vertex of head and are curved backwards; the third joint is a little less than half of second joint, in female the second joint is less than half of second joint; second joint with a tuft of hairs and scales on innerside. Antennae in male with longer cilia than in female; antennal process as long as thorax and covered with rather long spathulated scales and some hairs, especially toward apex. Hindwing with vein 3 from before angle; 4, 5 from angle and approximated for only  $\frac{1}{5}$  of length; 6 and 7 from upper angle; hind-wing with 4, 5 approximated only for  $\frac{1}{4}$ . This species comes very close to melanobasis, from which it differs in the following respects : abdomen with black dorsal patches except on the last segment; fore-wing with a fan of black scales on end of cell and with no apical patch; the two black apical striae absent, but on the other hand it has a fine terminal black line from near apex to tornus, often consisting only of hunules between the veins. Hind-wing with a diffused fuscous post-

medial mark from vein 2 to 5; a subterminal suffusion from vein 2 to apex and a black terminal line from tornus to apex.

#### Macalla melanosparsalis, sp. n.

Male. Head, thorax, abdomen, legs and wings whitish, more or less irrorated with black and fuscous-black (xlvi); head and thorax above densely irrorated with black: palpi almost black, third joint about  $\frac{1}{3}$  of second, evenly scaled; second joint just reaching vertex of head; antennae with the shaft fuscous, ciliated; basal antennal projection as long as thorax, covered with black, often spathulated seales and hairs; fore-legs with femora tinted with brick red (xiii) and irrorated with black, tibiae slightly so; tarsi black ringed with cream-colour; mid- and hind-legs, including spurs and tarsi, more or less densely irrorated with black; abdomen with first and second segment with a black mark confluent, so as to form one triangular patch, with the apex towards thorax; third segment irrorated with black for over posterior half, segments 4-7 evenly irrorated with black and ground-colour somewhat darker; eighth segment slightly irrorated with black; fore-wing with some subbasal brownish-red irroration mixed with black; a dense black irroration beyond this till antemedial line; a fan of spreading scales below lower median and before antemedial line and another in cell on antemedial line ; medial line broad, black and with a fan of black spreading scales in cell, straight and inwardly oblique; costal area beyond medial line black, discal and inner-marginal area thickly irrorated with black scales; postmedial line black, broad and distinct from  $\frac{2}{3}$  of costa to vein 6, then obsolete, diffused and double, inwardly oblique to plical fold, then erect to <sup>2</sup>/<sub>7</sub> of inner margin; whole area before this line and from vein 6 to tornus beyond this line irrorated with black scales; a dense black apical irroration well beyond postmedial line; just beyond this line at vein 6 the subterminal begins, so as to appear almost as a continuation of postmedial, but somewhat narrower, this line is dentate between veins 6-2 and somewhat curved, then angled inwardly to plical fold, then to near tornus; area, as far as termen, irrorated with black; a rather broad terminal black line, interrupted by very narrow streaks of ground-colour on the veins; cilia vinaceous-buff with a light thin basal line and a diffused light line in middle, also with some black scales opposite the veins before the middle line: some black terminal scales beyond this line. Hind-wing with a fuscous-black postmedial irroration from costa to 1c, from 3 to 1c broad and dense; beyond the postmedial the whole area is irrorated with fuscous from costa to 1b, broadest and densest between veins 3

and lc; a terminal line as in fore-wing; cilia as in fore-wing, but without the black scales opposite la, b, and c.

Underside :—fore-wing irrorated with vinaceous-buff and fuscous, least dense at inner-marginal area; a densely irrorated black spot at end of cell; the combined upper part of postmedial and subterminal lines well marked by a dense fuscous irroration; terminal line almost as clear as on upperside; hind-wing with costal and terminal area as far as 1c irrorated with vinaceous-buff; postmedial line indicated by a fuscous-black irroration from costa to 1b and before it some thin fuscous irroration; terminal line more diffused than in fore-wing.

Female like male, but hind-wing more densely irrorated with fuseous all over; cilia of antennae very short and no basal process.

Exp. Male and female types 25 mm.; two of the male co-types 22.5 mm.

Hab. Male type, Hope Fountain (near Bulawayo), 16. i. 1918; female type, Hope Fountain, 17. i. 1918; male co-type, Sawmills (S. Rhodesia), 5. ii. 1918; Hope Fountain, 16. i. 1918; Emangeni (S. Rhodesia), 18. i. 1918; one male co-type in Transvaal Museum collection from Waterberg distr. 1899.

This species is near to M. melanosparsalis Hmpsn.

#### Macalla cupreotincta, sp. n.

Male. Head, palpi, antennal process and thorax above densely irrorated with black and deep olive; fore- and mid-legs deep olive. irrorated with fuscous; hind-legs and rings of all tarsi creamcolour, irrorated with fuscous; abdomen above as in M. confusa, but the last three segments less densely irrorated. Fore-wing with basal patch as in M. confusa, but irrorated with black and bluish slateblack (xlviii) scales, except along costa; irroration between medial and postmedial lines more dense and mixed with ferruginous irroration; postmedial line more diffused and more dentate, but otherwise as in M. confusa; apical and terminal area as in M. confusa, but irroration more dense; cilia more uniform fuscous-black. Hindwing irrorated, except at basal-costal area, with ferruginous scaling, which is very dense and uniform at apical-terminal areas as far as 1c; a small postmedial fuscous-black macula near vein 2 and terminal lunule opposite more broad; terminal line much more narrow than in M. confusa; cilia ferruginous with fuscous-black marks as in M. confusa.

Female. 'Fore-wing with the markings more sharply defined and darker; postmedial line well defined; cilia almost entirely fuscous-

black. Hind-wing irrorated with ferruginous, very densely at terminal half; postmedial line distinct and from costa to vein 1b, then interrupted and continued between 1b and 1a; a similar streak towards base on 1c; some fuscous-black irroration at apical-terminal area; terminal line more broad and distinct than in male; cilia ferruginous, with fuscous scale at end of veins from 8 to 1c.

Underside as in *M. confusa*, but more suffused and irrorated with ferruginous, especially in female.

Exp. Male and female types 26 mm.; male co-type 22 mm.

Hab. Umtali, male type, 5. i. 1918; female type, 9. i. 1918; male co-type (in British Museum), 12. i. 1918.

In ground-colour and general marking this species is almost identical to M. confusa mihi, but the additional irroration of ferruginous (xiv), especially on the hindwings, give this species a darker and more coppery appearance.

#### Macalla confusa, sp. n.

Male. Palpi, antennal process, thorax, base and apical part of fore-wing deep olive (xl); ground-colour of fore-wing and hind-wing on upper- and under-side, thorax on underside, legs and abdomen cartridge-buff (xxx); head, palpi, antennal process and thorax irrorated with black scales; antennal process thickly covered with rather long seales and hairs, especially towards apical half, process reaching to end of thorax; antennae ciliated, shaft fuscous; palpi reaching above vertex of head, smoothly scaled, irrerated with black scales, very densely at third joint, and half of second joint; thorax and abdomen on underside irrorated with black; femora of all legs densely irrorated with black; tibia of all legs with a ring of ground-colour in middle and densely irrorated with fuscous-black (xlvi); tarsi of all legs fuscous-black ringed with ground-colour; abdomen with first and second segment each with a triangular black dense irroration so arranged that the apices touch each other: third and fourth segment irrorated with black on posterior twothirds, so as to leave an anterior ring of ground-colour; remaining segments rather densely irrorated with black, especially posteriorly. Fore-wing with basal deep olive patch sparsely irrorated with black; base at inner margin showing some ground-colour; a tuft of projecting scales on outer half of deep olive patch at inner margin; three black fans of spreading scales, one below lower median on subbasal line, which is only indicated at costa by a faint striga of ground-colour, second half-way in cell, third and largest at end of cell and projecting beyond the medial line which forms the boundary of the apical deep olive patch; medial line almost straight, slightly

oblique inwardly and only indicated by a more dense black irroration: postmedial line black, from two-third of costa, very oblique to vein 5, broad and almost straight, then forming an outward curve till vein 2 and dentate between each vein, then curved inwardly to vein 1b, then oblique to near tornus (probably this line is formed in the same way as in melanosparsalis, but the origin of the subterminal line and the greater part of what was the postmedial line beyond vein 5 is entirely lost, so that it appears one continuous line); area before the postmedial line and a thin line beyond it of ground-colour and thinly irrorated with deep olive and black; remaining space beyond postmedial light line and termen entirely filled in with deep olive, slightly irrorated, especially on the veins. with black; a broad black terminal line, leaving a striga of groundcolour on each vein; cilia with three rows of chequered fuscousblack scaling opposite the veins. Hind-wing very sparsely irrorated with fuscous at basal two-third; a postmedial fuscous irroration from costa to vein 1b, then faintly continued between veins 1a and 1b to base of wing, this irroration is very dense, broad and black between 1c and vein 3; a little distance from this postmedial irroration the apical area as far as vein 1c is thinly irrorated with fuscous; a broad terminal black line as in fore-wing; cilia as in fore-wing, but getting of ground-colour near tornus.

Underside :— both wings only irrorated at costal and apical region and very thinly fuscous in fore-wing and brownish in hindwing; a fuscous dense irroration in cell of fore-wing and a rather dense irrorated patch at end of cell; a similar patch in cell of hindwing; postmedial line as on upperside, but more faint; terminal lines consist of small black maculae only, situated between the veins; cilia as on upperside. Female with the antennae very shortly ciliated; wings on upper- and under-side as in male but more densely irrorated, especially in hind-wing.

Exp. Male 25 mm.; female 28 mm.

Hab. Male and female type, Bulawayo, 15-23. xii. 1919; eleven other males from Hope Fountain (near Bulawayo); Umtali, Emangeni in Dec. and Jan. This species is probably a development of M. melanosparsalis.

#### PYRALINAE.

#### DELOPTERUS, gen. nov.

#### Type basalis

Proboscis well developed; palpi porrect, extending beyond head about diameter of eye, loosely covered with scales, third joint hidden

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in hairs, filiform, about half of second joint, first joint nearly half of second joint; maxillary palpi small, three jointed and triangularly covered with hairs and scales; frons rounded; antennac with a tuft on front at first joint, shaft in male servate and biciliate, in female almost simple, cilia very short; tibia smoothly scaled, hind tibia with some hairs and two pairs of spurs, outer spur about half of inner spur. Fore-wing triangular, costa nearly straight, apex well rounded, termen very oblique, slightly rounded, tornus well rounded, inner margin straight, cell long, nearly <sup>2</sup>/<sub>4</sub> of wing; 1b apparently simple at base; 2, 3, 4, 5, 6, and stalk of 7, 8, 9, 10 at nearly equal distances given off from the cell; greatest distance between 5 and 6, shortest between 4 and 5; 7, 8, 9, 10 on a stalk of nearly half of 9; 7 from 8 just a little beyond 9; 11 from 3 of upper median; 12 straight, Hind-wing subtriangular; costa well curved from  $\frac{2}{3}$ , apex rounded, termen very oblique, nearly straight and roundly lobed at 1b, tornus rounded. inner margin straight; cell nearly  $\frac{2}{3}$  of wing; 2 from beyond  $\frac{2}{3}$ lower median; 3 from  $\frac{2}{3}$  2 to 5; 4 absent; 5 from lower angle; 8 parallel to upper median and very little approximated to 7

The triangularly scaled maxillary palpi are rather peculiar to this sub-family, the only other genus known to me to have such palpi is Sindris, but in that the labial palpi are upturned and the venation of both wings is totally different. I do not think, however, that this genus has any affinity with Sindris, it is perhaps more related to Discordia, which has the maxillary palpi more strongly developed. From this and *Proteinia* it differs in the coincidence of veins 4 and 5 in hind-wing; from the latter genus it differs mostly in length of lappi, shape of wings and venation of both wings; in wing-shape and general appearance it mostly resembles *Discordia*. From this it differs in the maxillary palpi, absence of vein 5 and in vein 9 of forewing coming from 8 before 7, and 2–5 being far from each other and at equal distance. In the hind-wing vein 8 is very slightly curved towards vein 7 and is more remote from that vein than in any other Pyralinae known to me.

#### Deltopterus basalis, sp. n.

Male and female. Head, palpi, thorax, abdomen, fore- and mid-legs, and ground-colour of fore-wing natal brown (xl), freely sprinkled with white; hind-legs warm buff (xv); tarsi of mid- and hind-legs natal brown, terminally ringed with warm buff; meta-

thorax with black scales and abdomen above with two semicircular maculae on sixth segment, dorsally separated from each other by white scaling; two lateral tufts of natal brown hairs on last abdominal segment. Fore-wing with the area between basal and antemedial lines not sprinkled with white; some dark antemedial edging against it, where the white scaling is very dense, gradually diminishing towards costa and medial line, which is very indistinct : a black spot at end of cell, around which the white irroration is quite dense: white irroration between antemedial and postmedial lines less dense at costa; postmedial beginning from costa as an oblique, well-defined, white striga as far as vein 6, then indistinct and somewhat wavy to tornus, sprinkled on outer side with white; no white scaling from costa to vein 5 between postmedial and subterminal lines: from vein 8 to vein 2 the subterminal area is densely scaled with white; terminal line black; interrupted on the yeins by white: cilia consist of fuscous and white scales mixed, with two transverse lines, of which the first is edged with white. Hind-wing whitish, evenly, except at base, irrorated with natal brown: terminal line of denser natal brown irroration: cilia with base whitish and with a transverse whitish line.

Underside whitish. Forewing densely irrorated with fuscous, sparsely at inner-marginal area and with some white scaling along costa and termen as far as vein 4; terminal line fuscous, with light spots on the veins; cilia light at base, transverse lines as above, but with white scaling at middle from costa to near tornus. Hindwing thinly irrorated with fuscous, densest at costal and terminal area as far as vein  $l_c$ ; cilia as above.

Exp. Male type 18 mm.; female type 17 mm.; male co-types 16-19 mm.; female co-type 20 mm.

Hab. Male type, Pretoria, 25. xii. 1916; female type, Pretoria, 21. ii. 1917. Male co-types from Pretoria, 12. xii. 1911 (Lord Gladstone), in Transvaal Museum; in coll. Janse from Sawmills, 1–4. ii. 1918; Bulawayo, 15–23 Dec.; female co-type from Pretoria (Capt. Paget) in Dec. 1911 (in Transvaal Museum); in all eighteen specimens.

#### Dattinia natalensis, sp. n.

Male and female. Head, palpi, shaft of antennae, thorax, abdomen at sides and on underside, last two segments on uppersides, and legs cream-buff (xxx); ground-colour of fore-wing light buff (xv); abdomen on upperside orange-buff except last two segments and narrow rings at end of each segment; palpi at sides here and there

irrorated with black; all legs irrorated with black; branches of antennae black: fore-wing has basal half, except along inner margin, irrorated with black, densely at cell and towards costa; a black line on submedian fold till near vein 2, and in some specimens traces of such a line in cell below upper median: traces of a medial black irrorated line; a black line on discocellulars, often interrupted at middle; a postmedial rather broad line consisting of fuscous-black irroration, angled at vein 8, somewhat incurved between veins 5 to 8 and inwardly oblique from vein 5 to inner margin, between every vein from inner margin to vein 8 the line is eurved inwardly, forming a dentate edge on outer side; some fuscous-black irroration before postmedial line along costa and some sprinkling below submedian fold; a moderate band of ground-colour following the postmedial line and from there the terminal area is well irrorated with fuscous-black: some black terminal lunules between the veins from 1b-8 and a black suffusion from 1b to postmedial line; cilia of ground-colour, irrorated, except at base, with fuscous-black; hind-wing hyaline white and with the veins irrorated with light buff; some terminal fuscous irroration, especially on the veins, from 1a to beyond apex; cilia light buff.

Female :---whole wing, except at base, irrorated with fuscous. Some specimens have on the fore-wing a brazil red (i) suffusion at the postmedial and inner-marginal area, in the female type the postmedial line consist mainly of a brazil red irroration sprinkled with black.

Underside :—fore-wing with the ground-colour as on upperside; a fuscous suffusion and irroration in cell, along costa and beyond postmedial line, which is indicated by a diffused irroration; terminal lunules less distinct and fuscous-black; a black suffusion on the costa at basal third; hind-wing as on upperside, but fuscous irroration above vein 8 to costa and terminal irroration narrower and less distinct.

Exp. Male type 33 mm.; female type 34.5 mm.; co-types 32-33 mm.

Hab. All but one specimen, eight in all, come from Umkomaas in 18–29. i. 1914.

This species is near to *D. perstrigata* Hmpsn. from Swaziland, from which it differs in the pectination of the antennae of the male becoming shorter at  $\frac{3}{4}$  and absent on last  $\frac{4}{5}$ , and also in the postmedial line being distinct.

It must be placed in Hampson's Section II, B, but the fore-wing has 4, 5 from a point in some specimens, in others well apart.

#### Poliostola, gen. nov.

#### Type phycitimorpha.

Proboscis well developed; palpi obliquely upturned, just extending beyond frons; first and second joint of equal length, covered with long scales in front, third joint less than half of second, obtuse and covered with scales; frons rounded, smoothly scaled; maxillary palpi small, filiform; antennae of male with a tuft of scales on front of first joint, servate and with two rows of cilia, longer than thickness of shaft and placed in bundles at each joint, diminishing towards tip; in female the cilia are about half of shaft; mid-tibia with two rounded bushy tufts of scales, mixed with some hairs; hind-tibia fringed with hairs on upperside and with two pairs of spurs of which the outer spur is a little over half of inner spur. Fore-wing rather broad, costa somewhat rounded, apex, termen and inner margin rounded; 1b well forked at base; cell a little over half of wing; vein 2 from 5 of lower median; 3 and stalk of 4, 5 from lower angle: stalk of 4, 5 nearly 1 of 4; discocellulars erect, curved; 6 from below upper angle; 7, 8, 9 stalked and from upper angle; 7 from nearly 1 of 9; 8 from nearly middle of 9; 10 from well beyond upper angle and slightly approximated to stalk of 7, 8, 9; 11 and 2 upper median, curved towards 10 at base; 12 parallel to upper median and vein 11. Hind-wing large, semicircular; la curved; 1b straight; 1c slightly curved and parallel to vein 2; cell short, less than half of wing owing to the discocellulars curving much inwardly; lower median from beyond middle of wing; 2 from \$ of lower median; 3 shortly stalked with stalk of 4, 5 and from lower angle; 4, 5 stalked for nearly 1/2 of 4; upper median far less than half of wing; 6 from upper angle, very shortly stalked with 7 and curved towards 5: 7 curved at basal third towards 8; 8 anastomosing with half of upper median, then free and approximated to 7 beyond upper angle; lower discocellular very oblique inwardly and long, upper discocellular oblique outwardly and only half the length of lower discocellular.

This genus is near *Pyralis*, but the palpi are rather shorter, second joint with scales in front and less curved; cilia of male antennae very long; hind-tibiae with fairly long hair above; fore-wing with vein 3 from angle; hindwing with 3 from angle, even slightly stalked with stalk of 4, 5; 6 very shortly stalked with 7, almost from a point.

#### Poliostola phycitimorpha, sp. n.

Male and female. Head, palpi, first joint of antennae and shaft of antennae in female, thorax, abdomen on upperside warm buff (xy) tinged here and there with tawny (xv); palpi, frons and sides of head well tinged with tawny; shaft of male antennae black; thorax and abdomen on underside tinged and irrorated with black; fore femora vinaceous-rufous (xiv); tibia and tarsi heavily irrorated with black: mid- and hind-legs black, ringed with ochraceous-buff, broadly at femora, narrower on tibiae and very narrowly at the end of each joint; spurs light ochraceous-buff, tipped and edged outwardly with black. Fore-wing with the ground-colour pinkishcinnamon (xxix), but for the greater part of costal and terminal area tinged and irrorated with fuscous (xlvi) except the base of wings, the area between medial and postmedial line below submedial fold, a fascia from apex to postmedial line at vein 6, and a narrow line beyond postmedial to inner margin; medial line made distinct by glaucous-green (xxxiii), scales before and beyond it in the dark costal area, but continued as a fuscous fascia beyond submedial fold; the line is curved from middle of costa to lower median, where it is slightly indented, then obliquely curved to 1b at  $\frac{1}{3}$ , where it is again indented, then well curved to inner margin; reniform of ground-colour, narrowly edged with black and broadly surrounded by glaucous-green scales; postmedial line indicated at dark costal area by glaucous-green scales beyond it as far as vein 6, then more sharply defined on ground-colour by its fuscous-black colour, dentated outwardly on the veins and curved inwardly between veius 1b to 2 and sharply angled inwardly below 1b; a fuscous-black subterminal line from vein 7, where it forms a streak on the vein and a broad patch below vein 6, then somewhat angled on the veins and parallel to postmedial from which it is separated by the groundcolour; a glaucous-green scaling between subterminal and terminal lines, which is black and broadest near apex; cilia vinaceousrufous at base, then a double fuscous fascia of which the inner one is broadest and tipped with fuscous; glaucous-green scales between the fascia, Hind-wing whitish; a fuscous irrorated postmedial line from costa to 1c, much angled at vein 4; some fuscous irroration beyond it at costa; a terminal fuscous irroration from costa to la, fainter but broader between veins 3 and 1c; cilia whitish with an indistinct fuscous fascia across from apex to 1c and tipped with fuscous.

Underside :---ground-colour of both wings whitish; fore-wing densely irrorated with black and fuscous from costa to below lower median as far as discocellulars and from costa to vein 6 as far as

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postmedial line; apical costal area tinged with pinkish buff (xxix) and thinly irrorated with fuscous-black; postmedial line fuscous as above, but not dentated and paler, ceasing before 1b; some thin fuscous irroration beyond it leaving a whitish fascia between them; a fuscous-black terminal line with whitish points on the veins; cilia whitish at base, then fuscous and with three pale narrow lines across it. Hind-wing with some thin irroration of fuscous along costa as far as postmedial line, which is as on upperside, but paler; some fuscous-black apical irroration, continued along termen till near tornus; cilia as above.

Exp. Male type 30 mm.; female type 31.5 mm.; male co-types 28 mm.

*Hab.* Types from Umtali (S. Rhodesia), 4. i. 1918; cotypes 4-8. i. 1918; one female in damaged condition from Warmberg (Zoutpansberg distr.), 12. xii. 1906; in all five specimens.

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